

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002873**Date Inspected:** 10-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

New Tower Bay 2

The Caltrans QA Inspector randomly observed the milling of the weld bevels on miscellaneous tower parts.

The Caltrans QA Inspector also randomly observed the machine Submerged Arc Welding (SAW) of the root pass and second pass on Weld Nos. ESD1-SA227A/H-52A, Skin Plate Face "E" in the flat groove (1G) welding position. The welding operator was Cao Gui mei (I. D. No. 047304) and the Welding Procedure Specifications (WPS) Nos. were WPS-B-T-2221-B-U3c-S-1 for the second pass and WPS-B-T-2221-B-U3c-S for subsequent fill passes. Certified Welding Inspector (CWI), An Qing Xiang (CWI No. 07120651), was present during the welding, as was ABF QA Inspector, Kong Yian hui. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were within the specified ranges on the WPS.

The Caltrans QA Inspector also randomly observed the machine Submerged Arc Welding (SAW) of fill passes on Weld Nos. ESD1-SA77A/E-44B, Skin Plate Face "C"; and ESD1-SA107D/J-21B, Skin Plate Face "A" in the flat groove (1G) welding position. The welding operator for both welds was Xue Yian (I. D. No. 040630) and the Welding Procedure Specification (WPS) No. was WPS-B-T-2221-B-U3c-S. Certified Welding Inspector (CWI),

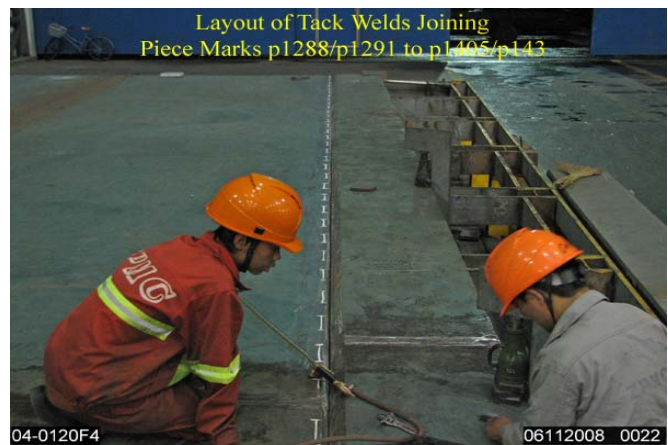
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An Qing Xiang (CWI No. 07120651), was present during the welding, as was ABF QA Inspector, Kong Yian hui. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were within the specified ranges on the WPS.

The Caltrans QA Inspector also randomly observed the shielded metal arc welding (SMAW) of run-off tabs using TL-508 (E7018) electrodes. The welder was Zhai Qing shan (I. D. 202354). The Weld No. had not yet been marked on the plate; the Piece Marks (Member I. D.) were p1288/p1291 to p1405/p143, Skin Plate Face "C". The QA Inspector observed preheating prior to welding and verified the qualifications of the welder to perform this work and the electrode type, TL508 (E7018).

All above observations appeared to meet the requirements of the job specifications.



Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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Inspected By: Jobes,Kenneth

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer